

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for controlling an inverter pulse width modulation (PWM) frequency of a liquid crystal display (LCD) in a portable computer, comprising:

identifying an LCD frame frequency recorded in extended display identification data (EDID) of a memory provided in an LCD;

deriving a PWM frequency of an inverter adapted to control a brightness of the LCD responsive to the identified LCD frame frequency; and

driving the LCD in accordance with the derived PWM frequency of the inverter.

2. (Currently Amended) The method of claim 1, wherein the LCD frame frequency is identified by a vertical sync frequency recorded in ~~the memory provided in the LCD~~ EDID.

3. (Original) The method of claim 1, wherein the memory is a non-volatile memory.

4. (Original) The method of claim 1, wherein the portable computer is configured to receive a plurality of LCDs, wherein at least two of the LCDs have different frame frequencies.

5. (Original) The method of claim 4, wherein the plurality of LCDs are made by different vendors.

6. (Currently Amended) The method of claim 1, wherein the LCD frame frequency is included in display timing range limit information included in the extended display identification data recorded in the memory, and wherein the LCD frame frequency ~~is~~ comprises a vertical sync frequency of the LCD.

7. (Original) The method of claim 1, wherein the PWM frequency of the inverter is derived using an equation "PWM frequency = $V_{sync} * n - m$ " where V_{sync} is a vertical sync frequency for the LCD, n is a positive integer and m is a constant selected in a range of 15 Hz to 30 Hz.

8. (Original) The method of claim 7, wherein values of "n" and "m" are set to 4 and 30, respectively.

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9. (Currently Amended) The method of claim 1, further comprising:
installing a replacement LCD ~~lamp~~;
identifying an LCD replacement frame frequency recorded in a memory provided in the replacement LCD ~~lamp~~, wherein the LCD replacement frame frequency is different from the LCD frame frequency;
deriving a replacement PWM frequency of the inverter responsive to the identified LCD replacement frame frequency; and
driving the replacement LCD in accordance with the derived replacement PWM frequency of the inverter.

10. (Currently Amended) The method of claim 9, wherein the LCD replacement frame frequency is included in ~~the display timing range limit information included in the~~ extended display identification data recorded in the memory, and wherein the LCD replacement frame frequency ~~is the~~ comprises a vertical sync frequency of the replacement LCD.

11. (Currently Amended) An apparatus that controls an inverter pulse width modulation (PWM) frequency of a liquid crystal display (LCD) in a portable computer, the apparatus comprising:

a memory recorded with extended display identification data (EDID) for an LCD, the memory provided in a lamp of the LCD or in the LCD;

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an inverter that supplies a voltage to the LCD; and
control means for controlling a PWM frequency of the inverter in accordance with an LCD frame frequency corresponding to information in the identification data~~EDID~~.

12. (Currently Amended) The apparatus of claim 11, wherein the LCD frame frequency is identified by a vertical sync frequency recorded in the memory provided in the LCD, ~~and wherein the information data is extended display information data.~~

13. (Original) The apparatus of claim 12, wherein the memory includes identification data for a plurality of LCDs.

14. (Original) The apparatus of claim 12, wherein the control means sets the PWM frequency of the inverter to a frequency that does not substantially interfere with the vertical sync frequency.

15. (Currently Amended) The apparatus of claim 12, wherein the control means identifies frame frequency rate information included in display timing range limit information included in the ~~extended display identification data~~ EDID as the vertical sync frequency of the LCD.

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16. (Original) The apparatus of claim 15, wherein the control means derives the PWM frequency of the inverter using an equation "PWM frequency = $V_{\text{sync}} * n - m$ " where V_{sync} is a vertical sync frequency for the LCD, n is a positive integer and m is a constant selected in a range of 15 Hz to 30 Hz.

17. (Original) The apparatus of claim 16, wherein values of " n " and " m " are set to 4 and 30, respectively.

18. (Currently Amended) The apparatus of claim 11, wherein the ~~LCD apparatus~~ is adapted to receive a plurality of ~~LCD lamps~~ LCDs, and wherein at least two of the ~~LCD lamps~~ LCDs have different frame frequencies.

19. (Currently Amended) The apparatus of claim 11, wherein the LCD frame frequency is identified in LCD lamp information ~~corresponding to of the identification data,~~ wherein the LCD lamp information is in extended display information data stored outside the ~~LCD~~ EDID.

20. (Cancelled)

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21. (Currently Amended) A portable computer, comprising:
- a main CPU-processor in a base module housing an input device;
 - a display coupled to the main CPU-processor to display data received from the CPU-processor;
 - a memory recorded with extended display identification data (EDID) for ~~an~~ a liquid crystal display (LCD) of the display;
 - an inverter that supplies a voltage to the LCD; and
 - a controller coupled to the main CPU-processor that controls a pulse width modulation (PWM) frequency of the inverter in accordance with an LCD frame frequency included in the ~~identification data~~ EDID.
22. (Original) The portable computer of claim 21, wherein the display is rotatably coupled to the base module.
23. (Original) The portable computer of claim 21, wherein a plurality of LCD lamps can be installed in the display, wherein at least two of the LCD lamps have different frame frequencies.

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24. (Original) The portable computer of claim 23, wherein the controller sets the PWM frequency of the inverter to a frequency not interfering with the frame frequencies of the plurality of LCD lamps.

25. (Currently Amended) The portable computer of claim 24, wherein the memory is comprises an EEPROM provided in the LCD, and wherein each frame frequency is identified according to a vertical sync frequency.

26. (New) The portable computer of claim 21, wherein the EDID includes a minimum frame frequency and a maximum frame frequency, and the controller controls the PWM frequency based on the minimum frame frequency or the maximum frame frequency.

27. (New) The portable computer of claim 21, wherein the EDID includes an average frame frequency, and the controller controls the PWM frequency based on the average frame frequency.

28. (New) The method of claim 1, wherein the EDID includes a minimum frame frequency and a maximum frame frequency, and the PWM frequency is derived based on the minimum frame frequency or the maximum frame frequency.

29. (New) The method of claim 1, wherein the EDID includes an average frame frequency, and the PWM frequency is derived based on the average frame frequency.

30. (New) The apparatus of claim 11, wherein the EDID includes a minimum frame frequency and a maximum frame frequency, and the control means controls the PWM frequency based on the minimum frame frequency or the maximum frame frequency.

31. (New) The apparatus of claim 11, wherein the EDID includes an average frame frequency, and the control means controls the PWM frequency based on the average frame frequency.